

## Chapter 4

# Behavioral/Cognitive Approaches to Post-traumatic Stress: Theory-Driven, Empirically Based Therapy

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Our goal in this chapter is to provide an overview of our behavioral/cognitive approach to the treatment of trauma-related psychological difficulties. We intend for readers to first read Chapter 2 in this volume, on behavioral/cognitive theories of post-traumatic stress, because those theories provide the conceptual basis for the therapeutic approach we outline here.

Often, clinicians who have not been trained in the methods of behavior therapy have the misconception that behavior therapists are unfeeling and mechanistic in their application of "techniques" (as opposed to therapy) to individuals viewed as subjects in an experiment, rather than clients in need of help. These feelings are particularly notable among clinicians treating the psychological sequelae of traumatic stress, where behavioral techniques are often characterized as re-traumatizing the client rather than providing the empathic and safe environment needed for healing. We believe this is an inaccurate characterization and that it is our responsibility as behavior therapists to better describe the behavioral approach to therapy and the rich theoretical and empirical tradition on which it is based.

As we noted in Chapter 2, the central tasks of behavior therapy are to carefully assess the circumstances surrounding any given behavior, hypothesize the function(s) of this behavior, derive interventions based on this functional evaluation, continually assess the effects of these interventions, and revise one's conceptualization and intervention strategies accordingly. Each element is guided by empirically supported theory as well as by existing treatment outcome research.

Treatment outcome research in the area of trauma (Foa, Rothbaum, Riggs, & Murdock, 1991; Keane, Fairbank, Caddell, & Zimering, 1989)

has focused primarily on alleviation of post-traumatic stress disorder (PTSD; American Psychiatric Association, 1980). However, basic behavioral principles and empirically based treatments from other areas of psychopathology can be used to understand and treat the range of traumatic sequelae that often impact trauma survivors. Treatments focused on PTSD symptoms can be augmented with interventions adapted from extant theories and treatments of co-morbid disorders (e.g., substance abuse: Marlatt & Vandenberg, 1998; depression: Beck, Rush, Shaw, & Emery, 1979; Lewinsohn, 1975; eating disorders: Garner & Garfinkel, 1997; Leitenberg & Rosen, 1988; other anxiety disorders: Borkovec & Roemer, 1994; Craske & Barlow, 1993; Riggs & Foa, 1993), as well as interventions aimed at associated features of post-traumatic adjustment, such as emotional dysregulation (e.g., Linehan, 1993a, 1993b), interpersonal difficulties (e.g., Cordova & Jacobson, 1993; Linehan, 1993a, 1993b;), and dissociative symptomatology (Wagner & Linehan, 1998).

We do not have sufficient space here to comprehensively describe behavioral/cognitive treatment for trauma survivors. Instead, we will do our best to capture the spirit of this model of therapy, show how it stems from behavioral theory, provide guidelines for implementing behavioral techniques along with clinical examples,<sup>1</sup> and provide references for those interested in learning more. In particular, we recommend Goldfried and Davison's (1994) *Clinical Behavior Therapy* for general information regarding behavioral approaches; and Foa and Rothbaum's (1998) *Treating the Trauma of Rape: Cognitive-Behavioral Therapy for PTSD*, along with Follette, Ruzek, and Abueg's (1998) edited volume, *Cognitive-Behavioral Therapies for Trauma*, for specific guidelines regarding behavioral treatment for trauma survivors. Our approach to treating post-traumatic stress is adopted from both cognitive-behavioral treatments for post-traumatic stress disorder (e.g., Foa & Rothbaum, 1998; Keane, Girardi, Quinn, & Litz, 1992; Levis, 1980; Resick & Schnicke, 1993), and from cognitive and behavioral approaches to treating other psychological difficulties that often characterize trauma survivors (e.g., anxiety disorders: Barlow, 1993; Borkovec & Roemer, 1994; depression: Beck et al., 1979; emotional dysregulation and interpersonal difficulties: Linehan, 1993a, 1993b; dissociation: Wagner & Linehan, 1998). As such, this approach incorporates a number of elements common to behavioral and cognitive-behavioral therapies, including psychoeducation, monitoring, exposure to feared stimuli, cognitive restructuring, training to remedy skills deficits, and relapse prevention.

For clarity, we have divided this chapter into the initial phase of treatment (including assessment, monitoring, psychoeducation, and establishing a therapeutic relationship), and then separate sections for exposure-based, cognitive, and skills-training interventions as well as relapse prevention. However, it is important to note that these are somewhat arbitrary distinctions. The elements crucial to the initial phase of treatment remain es-

sential throughout therapy and constitute active intervention, in our view. Similarly, the "interventions" overlap and interact both with one another and with the elements of psychoeducation, assessment, and monitoring.

## INITIAL PHASE OF TREATMENT

The primary goals of the initial phase of treatment are establishing a therapeutic relationship, establishing safety, assessment of strengths and weaknesses, formulating a behavioral conceptualization, and sharing with the client the formulation and plan for treatment. We emphasize the psychoeducational component of treatment throughout these early sessions so that clients come to understand their responses and the rationale behind the intervention strategies we propose. Throughout this and later phases of treatment, we emphasize the collaborative nature of the therapeutic relationship. We see the therapist as the expert in anxiety, behavioral principles, and the aftereffects of trauma, but maintain that the client is the expert in his or her own experience and history and is best able to recognize how the general principles we present relate (or do not relate) to his or her specific experience. Collaboration between the two ensures optimal results from treatment.

### Assessment

A comprehensive evaluation at the outset of therapy is invaluable in order to provide the information necessary to make informed clinical decisions and prioritize treatment goals. Keane and colleagues have detailed the importance of a comprehensive multimodal assessment of PTSD (Keane, Newman, & Orsillo, 1997; Keane, Wolfe, & Taylor, 1987; Litz, Penk, Gerardi, & Keane, 1992); the reader should explore these resources for further details. In addition to assessing PTSD symptomatology, the therapist should evaluate social and occupational functioning, co-morbid conditions, and any potentially destructive behaviors. It is important to ascertain a client's strengths as well as weaknesses—these will guide the choice of interventions and will help alleviate the demoralization commonly experienced by clients. Once the therapist has developed initial hypotheses regarding the patient's identified problems and has specified a point of intervention, specific cognitive-behavioral techniques can be introduced.

Another important component of assessment is history-taking. The client is given an opportunity to describe his or her life before the traumatic event(s), to describe the events themselves, and then to describe how he or she has adjusted since. This provides a narrative that helps both the client and the therapist understand the client's experience and the historical factors relevant to his or her current difficulties. This understanding helps validate the client's experience and increase his or her understanding of

seemingly incomprehensible responses. Also, the therapist learns the meaning the client places on events in his or her life, which has implications for how current events are perceived and interpreted. Further, disclosure of the traumatic event(s) strengthens the therapeutic relationship and shows the client that he or she can trust the therapist with the strong emotions that accompany disclosure. Such disclosure also constitutes a first step in emotionally processing these events and reducing associated distress and shame.

For example, an adult survivor of childhood sexual abuse may report that she is unable to assert her needs in interpersonal relationships. During the course of the interview, she may recall that the feelings of powerlessness and lack of self-confidence she frequently experiences in her current relationships date back to the abuse she experienced during adolescence. When asked to describe herself prior to the abuse, she may recall, for the first time in years, her previous sense of herself as competent and capable. This process of developing a complete narrative not only provides a context for her current behavior, it also brings to mind alternative, positive response options in her repertoire that she has not been using recently.

While historical information is useful for validation and hypothesizing about etiological factors, assessment of current maintaining factors is crucial for generating interventions. In addition to formal assessments such as structured interviews (with the client and significant others) and self-report instruments, behaviorists utilize a host of monitoring and observational strategies to gather information about the situations, thoughts, feelings, and consequences that impact various target behaviors. These may include formal behavioral observations (e.g., viewing a client interacting with a spouse), observation of the client's behavior during sessions with the therapist (an essential component of behavioral treatment), self-monitoring between sessions, and use of SUDS ratings (subjective units of distress reported on a 100-point scale ranging from not at all distressing to extremely distressing) to track levels of distress across situations as well as within and across sessions.

For the survivor of childhood sexual abuse described above, it would not be sufficient to establish that current feelings of powerlessness and low self-esteem were related to early traumatic experiences. We would want to assess the current antecedents and consequences of the client's unassertive behavior and feelings of powerlessness. So we might start by asking her to identify thoughts, feelings, sensations, and behaviors associated with her experience of interpersonal powerlessness. Then we might ask her to describe the most recent situation in which she felt this way, noting the cues preceding and consequences following this experience. We would also teach the client to monitor the circumstances surrounding this experience of powerlessness outside of session and we would collaboratively monitor her feelings of powerlessness within session. This analysis would help us determine the cues that trigger this experience and the function of the behaviors as-

sociated with it (i.e., the consequences that may serve to reinforce the behaviors), both of which provide important information for treatment. For instance, we may discover that when she feels powerless she experiences heightened anxiety and tends to respond by acquiescing to whomever she is interacting with. These individuals tend to respond positively to this behavior, so it is immediately reinforced. However, in the long run, this pattern serves to maintain her feelings of powerlessness because situations are so rarely resolved as she would like. Awareness of the immediate versus delayed consequences of her behavior will help her alter this pattern of responding despite the natural contingencies that maintain it (i.e., people's positive reactions to her non-assertiveness).

Overall, the primary goal of initial assessment is to determine the factors that contribute to problem behavior so that interventions can be planned. Relevant questions include: In what situations does this behavior occur? What thoughts/feelings typically precede this behavior? What consequences follow this behavior? What does the client tell him or herself about this behavior? What kinds of rules does this client seem to follow? What underlying beliefs are evident? In other words, the behavior therapist is exploring each aspect of behavioral theory introduced in Chapter 2 of this volume. Once an initial formulation has been established (collaboratively with the client), decisions regarding intervention are made. A comprehensive assessment allows a behavior therapist to predict how an intervention in one area will affect other areas. For instance, if substance abuse is conceptualized as negatively reinforced by the distress it alleviates, one can predict an increase in distress when substance use is curtailed. Therefore, concurrent skills training in distress tolerance might be indicated.

Initial assessment does not result in a static conceptualization. With each subsequent intervention, assessment continues in order to determine its efficacy and to evaluate the accuracy of the conceptualization. The principles of hypothesis-testing apply in clinical work as well as in research; any theory needs to be refutable and the good clinician will be willing to consider alternative hypotheses if his or her predictions are not borne out.

### **Psychoeducation**

An essential component of successful behavioral/cognitive therapy is helping a client understand responses that he or she has found puzzling, unreasonable, and frightening. Often, it is important to highlight the function of emotional responses, and how this function can be derailed through a variety of learning experiences. The fight-or-flight function of anxiety not only provides an excellent, easily explained example, but it also helps highlight the multiple components of anxiety (cognitive, physiological, behavioral) that clients will be asked to monitor (described below). The therapist can use this example to illustrate how the three components may interact

to maintain and escalate maladaptive, anxious reactions. Having clients imagine a frightening situation and notice the bodily changes that accompany this image, even though they are fully aware they are not currently in danger (e.g., heart rate increases, sweaty palms), provides a vivid example of how thoughts and perceptions influence bodily responses. The circularity of this response system should be highlighted, so the client understands how these bodily responses confirm the perception of danger, escalating the cycle of anxiety. Similar explanations can be provided for a host of emotional responses, setting the stage for reconceptualizing the client's presenting "problem" as examples of how his or her adaptation has gone awry.

As part of educating our clients, we provide information about post-traumatic stress disorder, as well as other common difficulties associated with traumatic exposure. We have found that, even as part of research protocols, participants often spontaneously report that they have found learning about the 17 symptoms of PTSD extremely helpful; that it has enabled them to put their disparate, distressing experiences into a context. Normalizing a client's experience can be extremely therapeutic. We similarly provide information about the behavioral conceptualization of these difficulties and provide a rationale for any proposed interventions. For instance, we commonly explain classical conditioning and draw a graph of how fear diminishes over repeated presentations so that clients can understand the theory behind exposure-based treatments. It is particularly important to explain the consequences of avoidance, as much of treatment will focus on reducing avoidance in order to minimize its negative after-effects. Explaining these principles to the client helps the client generalize what he or she learns in therapy and use the same principles to guide behavior even after therapy has ended.<sup>2</sup>

One component that distinguishes behavior therapy from dynamic approaches is the emphasis on the therapist communicating the conceptualization of the client's difficulties to the client. In addition to sharing with the client a general model of post-traumatic stress, the therapist offers his or her ideas regarding the function of various problematic behaviors, and communicates observations regarding the salient antecedent, organismic, and consequent variables relevant to target behaviors. Also, hypotheses are presented regarding relevant historical factors in order to validate the client and decrease self-blame. Client feedback is elicited and consensus is reached regarding case conceptualization. In this way, a working alliance is established and intervention proceeds based on an agreement between therapist and client. That is not to say that disagreements may not occur; in fact, in an honest, healthy therapeutic relationship they are inevitable. The successful behavior therapist will be able to listen to (and genuinely consider) the client's perspective, clearly communicate his or her own, and negotiate an agreement regarding a course to pursue. In addition, the therapist and

client should agree on further assessments to conduct and a period after which to renegotiate and reconsider the treatment plan. For instance, a client may be reluctant to proceed with exposure therapy, despite the therapist's belief that it is essential. Given that avoidance of emotional distress is common, this reluctance might be conceptualized as emotional avoidance. However, the therapist may negotiate with the client to proceed with a more gradual course of exposure or a different form of exposure. In this way, the client's comfort with the procedure is increased, and he or she is able to experience some of the positive effects of this approach, which is likely to increase motivation.

### Monitoring

A crucial aspect of behavioral/cognitive approaches to psychological difficulties is the monitoring of stimuli, responses, and consequences relevant to the presenting problem. The focus on monitoring reflects the behavioral emphasis on individual experience. By monitoring responses in a range of situations, the therapist and client are able to explore the function of each response in each given situation and therefore derive appropriate interventions. Continued monitoring allows for the assessment of the impact of a given intervention, and information obtained through monitoring is used to reconceptualize and establish new interventions in the absence of significant behavioral change.

Monitoring serves several other important functions. It serves to increase a client's awareness of his or her ways of responding. Many problematic responses happen largely outside of the client's awareness, making it difficult to alter behaviors. When an individual is able to detect early cues of a particular cycle (e.g., "When I start tapping my fingers, I know I am beginning to feel anxious"), he or she can implement coping responses before escalation and success is more likely. Similarly, if avoidance is a significant problem for an individual, early detection of the urge to avoid will help the person stay in the feared situation until anxiety and distress subside. Combined with education, this awareness may also help diminish a client's feelings of being "irrational" or "crazy" by providing a context for understanding seemingly unreasonable responses. For instance, one Korean War veteran felt he was heartless and unfeeling because he didn't experience any positive emotions when reunited with his high school buddies. However, monitoring of his responses in that situation revealed that he experienced a tightness in his stomach, and he recalled thoughts of "bracing" himself for a loss. This apparently happy reunion was a cue that reminded him of his friends who had died in Korea. His response to this memory was to "shut down" and experience nothing except a pain in his stomach.

Monitoring also serves a crucial function in maintaining the client's

safety. Initial assessment will highlight any of the client's potentially destructive behaviors. These behaviors are continuously monitored throughout the course of therapy. The therapist should pay particular attention to any threats to safety during the more intensive periods of therapy. Again, detecting early cues that might elicit unsafe or self-injurious behavior will help the client effectively implement new coping strategies.

Monitoring can be conducted in a variety of ways (see Beck et al., 1979; Goldfried & Davison, 1994, for more details). Standard cognitive-behavioral protocols usually include some type of daily record sheet in which clients are asked to note their anxiety, depression, or other target response levels at several points in the day (e.g., morning, noon, dinnertime, before bed) and record various details about emotion-eliciting situations (e.g., situational cues, thoughts, emotions, responses, outcomes). During the course of therapy, this monitoring can be expanded to include identification of distorted thought patterns, alternative ways of viewing the situation, and other forms of coping responses. Time is spent reviewing monitoring sheets in session and helping the client problem-solve difficulties that emerge in completing monitoring assignments. Methods of monitoring should be altered in order to increase clients' success in completing the task; a more simplified form may be used or monitoring may be initially done through in-session recall with the help of the therapist, if a client is having trouble doing it on his or her own. As with all behavioral techniques, it is important to minimize failure experiences and maximize success; this will increase clients' expectancies of therapeutic success and their own sense of self-efficacy, both of which correlate with behavior change (Bandura, 1977; Goldstein, 1962).

Monitoring is particularly useful in session. In-session monitoring of subtle changes in the client's affect and calling attention to those changes will help the client recognize a number of external and internal cues for various emotional responses. It will be easier for a client to recognize conditioned emotional responses and subtle forms of avoidance when a therapist can notice them in the moment and share this observation. Gradually, this responsibility should be shifted to the client. Any observation made by the therapist must be framed as a hypothesis. The therapist should be extremely careful to avoid taking the role of the all-seeing expert. Instead, the therapist can appropriately present as someone who is outside of the client's subjective experience and therefore able to describe some contingencies that may be more difficult for the client to perceive. The client remains the expert in his or her own experience and evaluates the accuracy of any observations made by the therapist.

Monitoring can also be done through imaginal exercises. A client may relate a particularly distressing experience but be unaware why she or he felt distressed in this situation. The therapist can have the client imagine him or herself back in that situation and ask him or her to attend to a

variety of somatic, situational, emotional, cognitive, and behavioral cues in order to fully recall the situation. This focused attention will help elucidate the salient stimuli and contingencies associated with the experience of distress. Also, although such an exercise will initially elicit some distress, it will aid in emotionally processing the event and lead to a decrease in distress if it is continued for a sufficient period of time (Foa & Kozak, 1986).

## **SPECIFIC INTERVENTION STRATEGIES**

Assessment, psychoeducation, and monitoring, as described above, are essential to any behavioral treatment and are incorporated in most empirically supported cognitive-behavioral treatments for PTSD (e.g., Foa & Rothbaum, 1998; Keane et al., 1992). However, their individual contribution to treatment outcome has yet to be explored. In contrast, the interventions that follow have been designated as active ingredients in the treatment of PTSD and studies have supported their efficacy. These interventions also have demonstrated efficacy with other presenting problems (e.g., exposure and cognitive restructuring for eating disorders; exposure for anxiety disorders; cognitive restructuring for depression) and so can be used for co-morbid disorders as well.

### **Exposure-Based Methods**

Extensive research has established exposure to feared stimuli as a critical feature of treatment of anxiety disorders (e.g., Craske & Barlow, 1993; Lindemann, 1989; Riggs & Foa, 1993). Similarly, direct therapeutic exposure (DTE; repeated imaginal rehearsal of traumatic events) has emerged as the PTSD treatment with the strongest empirical support (Foa & Meadows, 1997; Keane, 1998). The basic principle behind exposure is that prolonged exposure to conditioned feared stimuli without the occurrence of the unconditioned stimuli will lead to fear reduction and a decrease in threatening associations. Exposure is accomplished by accessing the fear network (presenting stimulus, response, and meaning cues, eliciting an initial fear response) and maintaining exposure so that fear can diminish and new, non-threatening meanings can be incorporated (Foa & Kozak, 1986). Because avoidance interferes with the process of fear reduction and with emotional processing in general, careful attention must be paid to any form of avoidance, and the client must be encouraged to approach any feared or distressing material.

The emphasis on exposure and encouraged non-avoidance is central to our treatment approach with trauma survivors and is why we consider behavioral principles fundamental to our work. Much of our therapy involves providing learning experiences in which clients confront feared material and discover that feared outcomes do not follow: They are not

re-traumatized, they do not "fall apart," their therapist does not leave them, they do not start crying and never stop. Direct learning experiences such as these lead to the most powerful forms of behavioral change. Simply rationally determining that an event or a memory is not dangerous or a feared outcome is not likely is often insufficient. We have all had the experience of *knowing* that something isn't dangerous but still *feeling* that it is. This distinction can be highlighted and discussed, but the most effective way of counteracting it is to experience both the feared situation (even imaginally) and the lack of negative outcome. Because of the way our cognitive biases (schemas) guide our observations, it is important to direct a client's attention toward both the threatening cues and the non-threatening outcome in any given exposure, so that new learning can take place and danger schemas can be altered.

### *Direct Therapeutic Exposure*

The tradition of exposure-based treatment for anxiety disorders led to the development of direct therapeutic exposure (DTE) for the treatment of PTSD. Techniques of DTE were developed based on the principles of anxiety reduction that have evolved from a long history of laboratory research. These studies indicated that prolonged, focused exposure associated with initial arousal and subsequent within-session and between-session habituation yields the most beneficial outcomes in treating phobic anxiety (see Foa & Kozak, 1986, for a review of this literature).

In the most common forms of direct therapeutic exposure for PTSD, flooding or prolonged exposure, the client is asked to imaginally relive the traumatic event, with all of the associated stimulus, response, and meaning elements. This is done repeatedly, in the safe context of therapy, until the arousal and distress associated with the memory decrease. Although this therapy is associated with an initial increase in distress, studies demonstrate a significant decrease in post-traumatic symptomatology and trauma-related arousal following repeated imaginal exposure (e.g., Foa et al., 1991; Keane et al., 1989). In fact, a recent process analysis of therapeutic change revealed that rape survivors who displayed high levels of emotional response or "engagement" during initial imagery along with habituation (decreased fear ratings across sessions) had the highest positive response rates to prolonged exposure (Jaycox, Foa, & Morral, 1998).

Typically, in direct therapeutic exposure, the client first describes the event in as much detail as possible. For the retelling, the client is encouraged to close his or her eyes, while the therapist asks questions that focus and enhance the image. For example: "Where are you standing?" "What do you see? Smell? Hear? Taste?" "What do you feel in your body?" "What are you saying to yourself?" "What happened next?" The therapist pays particular attention to any cues of distress or avoidance in order to target the most traumatic portions of the memory. The therapist gently redirects

the client toward the components that seem most emotionally evocative, in order to ensure complete processing. This procedure is done repeatedly with SUDS ratings preceding and following each trial, until reported distress decreases. It is important to leave sufficient time at the end of the session to process the experience, regulate distress, and assess safety. For this reason, it may be necessary to schedule sessions lasting longer than 45 minutes. With certain clients we will plan exposure sessions to last 90 or even 120 minutes in order to allow time for distress to reduce and processing to occur.

In conducting imaginal exposure, it is important to remain cognizant of the underlying principles and guide intervention accordingly. Clients should be encouraged to approach threatening, distressing material sufficiently, abstain from subtle forms of avoidance (e.g., distraction, engaging in neutralizing thoughts), and maintain exposure until some relief is experienced. Clients need to experience a sufficiently strong emotional response so the full memory network (with details of stimulus, response, and meaning) is activated and new information (for instance, safety cues) is incorporated. An initial lack of emotional responding is often an indication that the client is engaging in some form of emotional avoidance; this avoidance needs to be eliminated. On the other hand, it is important not to elicit such a pronounced emotional response that the client dissociates or engages in other dangerous forms of avoidance (substance use, self-injury). Initial training in distress tolerance skills (e.g., Linehan, 1993b) can be helpful in teaching the client to tolerate concomitant emotions so that new learning can occur. Collaboration with the client in maximizing therapeutic exposure but minimizing risk (e.g., suicidal ideation, substance abuse, dissociation) is imperative. The therapist and the client should carefully monitor any potential risky behaviors throughout the course of exposure-based treatment and maintain specific contracts to ensure the client's safety. The therapist needs to maintain a careful balance between ensuring that exposure is tolerable, but not colluding in the client's avoidance of distress and traumatic memories. This is particularly crucial because therapists are human, and therefore likely to have their own tendency to avoid traumatic material and intense emotions.

If the client has experienced multiple traumatic events, each is given a SUDS level and a hierarchy is created from least to most distressing. The client and therapist then choose an event to begin exposure with (typically one that is at least moderately distressing). The client is often encouraged to select an event that is being frequently re-experienced. Repeated exposure of the initial memory is continued until habituation occurs. At that point, the clinician and client work to identify another memory that continues to elicit distress and begin imaginal exposure with that memory. Imaginal exposure with one memory often leads to reduced distress associated with other memories.

In selecting target events, the therapist should be guided by behavioral theory: Distress must be significant enough to access the memory structure but not so high as to result in avoidance and interfere with incorporation of new information. Assessment of this balance is an ongoing process and therapists must work flexibly and thoughtfully with fear hierarchies. It may turn out the target initially chosen is not the most appropriate one. For instance, a female veteran had experienced several sexual assaults as well as a combat-related trauma. After developing a fear hierarchy, it was determined that exposure would begin with one of the sexual assault experiences, which was rated as moderately distressing. However, the initial imaginal exposure was not sufficiently distressing, and no avoidance could be detected, so the client was encouraged to move up the hierarchy to a more distressing event. The processing of the latter event was followed by improvement in symptoms related to both events.

Although direct therapeutic exposure is an emotionally evocative therapeutic technique, in our experience, clients ultimately welcome the invitation to face the memories that have plagued them. Although they are reluctant to remember, or to share, the traumas they have endured, they are well aware that their avoidance is ineffective and they are able to understand the rationale behind direct therapeutic exposure. A collaborative stance in which client and therapist agree to work together to overcome the client's avoidance facilitates the efficacy of direct therapeutic exposure and avoids the risk of the client feeling re-traumatized. The therapist acts as a gentle, caring, but insistent guide, helping the client to accomplish his or her stated goal of reducing the distress associated with memories. For a more detailed guide in this type of treatment, the reader is referred to Foa and Rothbaum (1998).

Although the efficacy of prolonged imaginal exposure in the treatment of PTSD has been demonstrated, comparison and dismantling studies (such as those conducted with the other anxiety disorders) have yet to be conducted with trauma survivors. Thus, there remains more to learn about the optimal form of direct therapeutic exposure for this population. Although fear is clearly an important component of post-traumatic reactions, other emotions are also implicated, so we cannot be certain that findings from the fear literature generalize. Resick (Resick & Schnicke, 1993) has included an alternate form of exposure as one component in her Cognitive Processing Therapy (CPT): Clients are asked to write about their traumatic event repeatedly, and encouraged to fully experience all of the concomitant emotions. Direct comparisons of imaginal and writing forms of exposure have yet to be conducted. In the absence of sufficient data, it is advisable to rely on theory and existing evidence from the other anxiety disorders in formulating exposure-based interventions for trauma. Also, research has indicated that images are more emotionally evocative than words (Vrana,

Cuthbert, & Lang, 1986), further supporting the use of imaginal exposure to facilitate emotional processing (Foa & Kozak, 1986).

### *Adding an In Vivo Element to Exposure*

Although imaginal exposure provides an excellent means for clients to confront the feared memories of their trauma, exposure to objects or real-life situations is often helpful or even necessary to fully address clients' fears. Behavior therapists flexibly and creatively construct a host of imaginal and in vivo exercises in order to help clients face the range of experiences they have come to fear. Again, treatment rests on a well-developed case conceptualization. Exposure exercises are constructed by identifying central conditioned stimuli and preventing habitual forms of avoidance. Straightforward in vivo exercises are often indicated: Clients may develop a hierarchy of avoided situations and begin approaching them and remaining in them until their fear subsides. In vivo exposure exercises may focus on situations that are perceived as dangerous (e.g., standing in a crowded room) or stimuli that elicit memories of the specific trauma (e.g., watching TV documentaries about rape survivors). The exposure exercises may be incorporated as homework, or conducted during sessions with therapist assistance. Following are several examples of ways we have used the principle of exposure and incorporated in vivo elements in our treatment of trauma survivors.

Some variations involve minor alterations of the procedure described above. For example, in vivo and imaginal exposure techniques may be combined. One female combat veteran who experienced a nighttime firefight was encouraged to turn the lights out during the imaginal exposure exercise in order to enhance the intensity of the emotional response. For another survivor, imaginal exposure exercises took place in an isolated clinic stairwell, as she had been assaulted in a similar location. These combinations of imaginal and in vivo exposure both intensify the emotional responding during exposure and increase generalization of new learning to salient cues.

Sometimes a client will present with marked avoidance of concrete trauma-related cues that can be incorporated into in vivo exposure. For example, a combat veteran was encouraged to bring to session a large unopened box of war memorabilia. Initially, these items were too distressing to view during session, so several sessions were spent with the box in the middle of the room, until the client was ready to approach the material. Several sessions were spent reviewing each item, discussing its meaning and importance and making decisions regarding what to do with each item. In this way, the client not only approached previously avoided physical objects, but also reconnected with long-avoided memories. After these recollections were sufficiently processed, the client was able to physically and emotionally achieve closure through disposition of the items.

In vivo exposure can also involve exposure to previously avoided inter-

personal relationships. In one case, a woman engaged in imaginal exposure to several sexual assault experiences. While many of her symptoms improved, this client continued to experience high levels of shame and interpersonal avoidance. This was addressed by constructing a series of opportunities for her to disclose the experiences she considered shameful to individuals other than the therapist (other clinic staff). In order to fully access this emotional network, a hierarchy was constructed whereby initial planned disclosures were met with empathic responses, whereas later disclosures were met with more judgmental responses. The therapist worked closely with the client to help her prepare for each exposure, so that when she met with the judgmental responses she was able to dismiss them and maintain her own positive self-regard. Following this intervention, the client reported a sustained improvement in interpersonal relationships and reduction in feelings of shame.

In addition to these types of explicit exposure exercises, the principles of exposure guide the behavior therapist's moment-to-moment interactions with the client. Attention is paid to subtle cues of avoidance, and the client is gently guided to face distressing feelings, memories, thoughts, and situations. As always, the case conceptualization serves as a backdrop that helps the therapist determine where to focus attention and facilitates detection of important in-session behaviors. Again, these observations and subsequent interventions are conveyed to the client, so that although the terms "exposure" and "habituation" may not be used, the concepts are conveyed. For instance, in the course of therapy with a male combat veteran, it became clear that avoidance of any degree of interpersonal intimacy was a crucial factor in the client's difficulties. Emotional disclosure within the therapeutic relationship was thus construed as an essential form of exposure, habitual avoidance was noted when it occurred, and the client was encouraged to stay with the feelings of intimacy and trust as they arose, along with the terror that accompanied them. Gradually, the client was able to tolerate higher levels of intimacy both within the therapeutic relationship and in outside relationships as well.

### **Cognitive Components**

Behavioral/cognitive therapy for trauma-related difficulties incorporates consideration of cognitive elements of adjustment. As discussed above, associative networks include cognitive elements that may be easily activated, so that a survivor perceives the world as dangerous, him or herself as somehow inherently flawed, others as untrustworthy, and so on (Foa & Riggs, 1994). Direct therapeutic exposure, and other exposure exercises such as those described above, directly challenge traumagenic schemas so that in many cases other forms of cognitive therapy may not be needed. For example, a male client did imaginal exposure with an extremely distressing

memory in which he was attacked from behind in an alley. He struggled with his assailant, and eventually strangled him. For the first five repetitions of this scene, the client was extremely focused on the sensations in his hands as he strangled the man. However, during the sixth session, this client spontaneously reported that he was aware of the feeling of the man's hands around his neck, and his own inability to breathe. Following termination of the image, this man exclaimed, "He would have killed me. I had to kill him." The therapist had not addressed these issues cognitively yet; this new realization emerged from the repeated emotional processing of the event. Following this session, the client reported a dramatic decrease in nightmares and intrusions, as well as a decrease in feelings of shame and guilt.

In the example above, the client came to accept the event and his actions by emotionally processing it. We feel that acceptance of traumatic memories is often a crucial element in the treatment of trauma survivors (see Hayes, Jacobson, Follette, & Dougher, 1994, for a broader discussion of the role of acceptance in psychotherapy). While this acceptance may spontaneously emerge during the course of direct therapeutic exposure, it may also need to be more directly addressed. For example, the therapist might help the client frame his or her behavior (or lack thereof) in light of the absence of viable alternatives.

Often, cognitive techniques are used as an adjunct to exposure-based treatments. However, Resick and Schnicke (1993) outline an approach for treating rape survivors in which cognitive therapy serves as the primary intervention. This approach, labeled Cognitive Processing Therapy (CPT), adapts Beck et al.'s (1979) cognitive therapy for depression to address rape-related schemas (McCann & Pearlman, 1990). As noted above, this treatment also incorporates an exposure element in which clients write about their traumatic experience repeatedly, and are encouraged to focus on the emotions evoked. This treatment (CPT) led to significant symptomatic improvement in rape survivors with PTSD compared to a wait-list control group (Resick & Schnicke, 1992). A recent study found that cognitive restructuring alone was also beneficial in the treatment of PTSD, leading to comparable improvement to direct therapeutic exposure (DTE) alone, and greater improvement than relaxation alone (Marks, Lovell, Noshirvani, Livanou, & Thrasher, 1998).

Cognitive therapy can be conducted formally by monitoring thoughts, identifying distorted thought styles, challenging beliefs, and conducting behavioral experiments to explore new hypotheses (see Beck et al., 1979). Beck recommends teaching the client to act as a scientist and treat his or her thoughts as hypotheses rather than facts. This spirit can be communicated more informally as well. We often introduce the notion of alternative perspectives or multiple ways of viewing a given situation (one can give an example of how several people witnessing a given event may construe it differently) and then simply encourage clients to question their interpreta-

tions and to explore alternative ways of viewing circumstances. The ultimate goal is cognitive flexibility. It is extremely important in this work not to convey that the client's views are somehow wrong or irrational. Rather, we choose to take a stance that many possible interpretations have merit, but it is worthwhile to explore a variety of options and actually test out different predictions. Further, we encourage clients to examine the way their schemas have been shaped by their traumatic experience and how this may bias their interpretation of current events.

### Skills Training

A final component of many behavioral/cognitive approaches to treatment is skills training. In the PTSD literature, this component has focused primarily on control of anxiety in the form of cognitive restructuring as described above, and relaxation training. Treatment packages such as stress inoculation training that incorporate anxiety-reduction skills training as well as self-monitoring components have been shown to be more effective than wait-list controls in treating rape survivors with PTSD (Foa et al., 1991). Clients can be taught a number of different methods of relaxation (diaphragmatic breathing, progressive muscle relaxation, applied relaxation, meditation) and taught to implement these relaxation techniques in response to cues of anxious responding. However, it is important that relaxation not begin to serve an avoidant function. Trauma survivors have often come to fear their own emotional responses and to construe anxiety as inherently dangerous. Learning to relax may help counter the lack of control clients feel over their responses, but it can also interfere with learning that in fact anxiety isn't dangerous and can be tolerated. It is important to attend to these distinctions; ideally, clients would learn to master their experience of anxiety, so they can tolerate it in some moments and lessen it in others.

Cognitive restructuring and various forms of self-talk can also be taught as coping skills to use in stressful situations. Linehan's (1993b) skills training manual for borderline personality disorder (BPD) contains several distress tolerance skills that may be applicable to this population (but have yet to be empirically tested).

Skills training that extends beyond the target of anxiety may be similarly beneficial in this population. As noted in Chapter 2 trauma survivors often exhibit deficits in emotion regulation and interpersonal functioning. Those individuals who were raised in traumatic or invalidating environments may never have learned to recognize, communicate, or regulate their emotional states and would therefore benefit from emotion skills training. Similarly, those who never had sufficient models of healthy interpersonal relationships may benefit from social skills training. Linehan (1993b) has outlined a series of emotion regulation skills and interpersonal (communication) skills

in her treatment of BPD that may serve as beneficial interventions for trauma survivors. A treatment package that included these skills training components (along with individual cognitive-behavioral therapy) was associated with improvements in interpersonal functioning among women with borderline personality disorder (Linehan, Tutek, Heard, & Armstrong, 1994). A study is currently underway (M. Cloitre, Principal Investigator) exploring the efficacy of a treatment package that combines Foa's prolonged exposure and Linehan's interpersonal and emotion regulation skills training in the treatment of adult female child sexual assault survivors. Preliminary findings reveal improvements in PTSD symptomatology as well as in alexithymia, dissociation, and anger regulation compared to a wait-list control group (Cloitre, 1998). Integration of skills training approaches into exposure-based treatment may be a promising avenue for future research, particularly with more chronic traumatized individuals among whom emotional and interpersonal skills deficits may be more common (Cloitre, Scarvalone, & Difede, 1997).

#### **LATER STAGES OF TREATMENT, RELAPSE PREVENTION, AND TERMINATION**

As we discussed earlier, behavioral/cognitive therapy involves a constant process of assessment, conceptualization, intervention, reassessment, reconceptualization, and continued intervention. As presenting problems diminish and new, more desirable patterns of behavior develop, it is important to monitor these changes, both so that the client becomes aware of the progress he or she is making, and so that discontinuation of therapy can be considered. In the course of behavioral change, new difficulties may become evident, and therapy may need to be altered accordingly. For instance, social skills deficits were not initially apparent in a veteran with chronic PTSD who experienced such marked interpersonal avoidance that he rarely left his basement. However, following successful processing of his combat experiences and training in stress management skills, he began to desire social interaction, but found that he did not know what to say to people or how to interpret what they said. Therapy focused on interpersonal skills training using psychoeducation, modeling, problem solving, and provision of feedback on in-session interpersonal behavior. In this instance, ongoing assessment prevented premature termination and helped determine additional targets of treatment.

The final phase of treatment also incorporates the principles of relapse prevention outlined in Marlatt and Gordon's model for alcohol abuse treatment (Marlatt & Gordon, 1985). Given that therapy involves helping clients learn new behavioral patterns, we expect that old, habitual patterns of responding may reemerge in the future, particularly during times of stress. Numerous laboratory studies provide evidence that extinction (re-

mission of learned responses) does not involve the unlearning of an association, but rather new learning of a second association, so that in some contexts the old associations will reemerge (e.g., Bouton, 1994). We prepare clients for the reemergence of such behaviors and encourage them to recognize less desirable ways of responding and to use what they've learned in therapy. We believe that an important aspect of recovery is developing a perspective that allows one to take the challenges that will arise in the future and cope with them successfully, rather than viewing them as evidence that one isn't really "better" and is still "damaged" in some way. Marlatt and Gordon (1985) convey this by relabeling apparent "relapses" in drinking behavior as "lapses" that provide an opportunity to learn more about antecedents and consequences for this behavior, resulting in more successful coping in the future.

Once therapeutic gains have been made, both the client and the therapist need to begin evaluating the continued need for treatment. Often the decision to end therapy is obvious—clients are no longer experiencing the interpersonal, emotional and behavioral difficulties that caused them to seek treatment, the skills they have learned have become habitual, and they have a more flexible, adaptive view of themselves and the world. Other times, particularly in cases of chronic developmental trauma histories, although substantial gains have been made, some difficulties still linger. However, a break from therapy may help a client increase his/her sense of self-efficacy so that termination, or at least temporary suspension of therapy, is advisable. We feel it is important to encourage clients to try newly acquired coping skills on their own. We have found that often clients come to feel that they are only doing well because they are in therapy and need to challenge this assumption by demonstrating that they can maintain gains independent of therapy. When working with trauma survivors it is also important to address the reality that therapy cannot accomplish what may be most desirable—that the trauma never happened. Although memories can be processed, skills can be learned, and new, adaptive belief systems can be developed, the reality of their history cannot be undone and often therapy needs to incorporate grieving for all they have lost.

Termination is best accomplished as therapy is—collaboratively, with the therapist expressing his or her faith in the client's ability to cope. The ending of the therapeutic relationship may serve as a cue for interpersonally related, conditioned emotional responses, such as fears of abandonment and rejection. Throughout the termination process, attention should be paid to these responses and they should be understood in the context of other issues addressed in therapy. The ending of the therapeutic relationship may also provide a first opportunity for a trauma survivor to say good-bye and grieve the end of a relationship in a healthy, meaningful way. Clients are encouraged to recontact the therapist as needed. We have found that an effective way to assure maintenance of therapeutic gains is to remain

available for brief booster sessions, so that if a time of significant stress arises, a client can return for one or two sessions to reestablish the coping abilities that they gained in therapy.

We have attempted to capture here both the empirical rigor and the clinical sensitivity that we feel characterizes a behavioral approach to the treatment of post-traumatic stress. We have a great deal left to learn from basic research and clinical trials about the relevant mechanisms of emotional processing and therapeutic change among the diverse clinical presentations of trauma survivors. However, behavioral approaches validated in the treatment of other presenting problems, coupled with those developed particularly for the treatment of trauma, provide a firm empirical and clinical basis on which to construct our individualized treatment plans and formulate future research studies.

## NOTES

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1. In order to protect the confidentiality of our clients, we provide very little identifying information for cases and have altered this information in several places. We kept crucial clinical information intact, however.

2. We have found that clients with a broad range of intellectual abilities are able to understand this material when it is presented clearly.

## REFERENCES

- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: American Psychiatric Association.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Barlow, D. H. (Ed.). (1993). *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed.). New York: Plenum.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Borkovec, T. D., & Roemer, L. (1994). Generalized anxiety disorder. In R. T. Ammerman & M. Hersen (Eds.), *Handbook of prescriptive treatments for adults* (pp. 261–281). New York: Plenum.
- Bouton, M. E. (1994). Context, ambiguity and classical conditioning. *Current Directions in Psychological Science*, 3, 49–53.
- Cloitre, M. (1998). Sexual revictimization: Risk factors and prevention. In V. M. Follette, J. I. Ruzek, & F. R. Abueg (Eds.), *Cognitive-behavioral therapies for trauma* (pp. 278–304). New York: Guilford Press.
- Cloitre, M., Scarvalone, P., & Difede, J. A. (1997). Posttraumatic stress disorder,

- self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress*, 10, 437-452.
- Cordova, J. V., & Jacobson, N. S. (1993). Couple distress. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 481-512). New York: Plenum.
- Craske, M. G., & Barlow, D. H. (1993). Panic disorder and agoraphobia. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 1-47). New York: Plenum.
- Foa, E., & Riggs, D. (1994). Posttraumatic stress disorder and rape. In R. S. Pynoos (Ed.), *Posttraumatic stress disorder: A clinical review* (pp. 133-163). Lutherville, MD: Sidran Press.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99, 20-35.
- Foa, E. B., & Meadows, E. A. (1997). Psychosocial treatments for posttraumatic stress disorder: A critical review. *Annual Review of Psychology*, 48, 449-480.
- Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: Cognitive-behavioral therapy for PTSD*. New York: Guilford Press.
- Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. (1991). Treatment of post-traumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology*, 59, 715-723.
- Follette, V. M., Ruzek, J. I., & Abueg, F. R. (Eds.). (1998). *Cognitive-behavioral therapies for trauma*. New York: Guilford Press.
- Garner, D. M., & Garfinkel, D. E. (Eds.). (1997) *Handbook of treatment of eating disorders* (2nd ed.). New York: Guilford Press.
- Goldfried, M. R., & Davison, G. C. (1994). *Clinical behavior therapy* (2nd ed.). New York: John Wiley & Sons.
- Goldstein, A. P. (1962). *Therapist-patient expectancies in psychotherapy*. New York: Pergamon.
- Hayes, S. C., Jacobson, N. S., Follette, V. M., & Dougher, M. J. (Eds.). (1994). *Acceptance and change: Content and context in psychotherapy*. Reno, NV: Context Press.
- Hope, D. A., & Heimberg, R. G. (1993). Social phobia and social anxiety. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 99-136). New York: Plenum.
- Jaycox, L. H., Foa, E. B., & Morral, A. R. (1998). Influence of emotional engagement and habituation on exposure therapy for PTSD. *Journal of Consulting and Clinical Psychology*, 66, 185-192.
- Keane, T. M. (1998). Psychological and behavioral treatments for post-traumatic stress disorder. In P. E. Nathan & J. M. Gorman (Eds.), *A guide to treatments that work* (pp. 398-409). New York: Oxford University Press.
- Keane, T. M., Fairbank, J. A., Caddell, J. M., & Zimering, R. T. (1989). Implosive (flooding) therapy reduces symptoms of PTSD in Vietnam combat veterans. *Behavior Therapy*, 20, 245-260.
- Keane, T. M., Gerardi, R., Quinn, S., & Litz, B. T. (1992). Behavioral treatment of post-traumatic stress disorder. In S. M. Turner, K. S. Calhoun, & H. E.

- Adams (Eds.), *Handbook of clinical behavior therapy* (2nd ed., pp. 87–98). New York: John Wiley & Sons.
- Keane, T. M., Newman, E., & Orsillo, S. M. (1997). Assessment of war-zone related PTSD. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 267–290). New York: Guilford Press.
- Keane, T. M., Wolfe, J., & Taylor, K. L. (1987). Post-traumatic stress disorder: Evidence for diagnostic validity and methods of psychological assessment. *Journal of Clinical Psychology*, 43, 32–43.
- Leitenberg, H., & Rosen, J. C. (1988) Cognitive-behavioral treatment of bulimia nervosa. In M. Hersen & R. M. Eisler (Eds.), *Progress in behavior modification* (Vol. 23, pp. 11–35). Newbury Park, CA: Sage Publications.
- Levis, D. J. (1980). Implementing the technique of implosive therapy. In A. Goldstein & E. B. Foa (Eds.), *Handbook of behavioral interventions* (pp. 92–151). New York: John Wiley & Sons.
- Lewinsohn, P. M. (1975). The behavioral study and treatment of depression. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), *Progress in behavior modification* (Vol. 1, pp. 19–64). New York: Academic Press.
- Lindemann, C. (Ed.). (1989). *Handbook of phobia therapy*. Northvale, NJ: Jason Aronson.
- Linehan, M. (1993a). *Cognitive behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Linehan, M. (1993b). *Skills training manual for cognitive behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Linehan, M. M., Tutek, D. A., Heard, H. L., & Armstrong, H. A. (1994). Interpersonal outcome of cognitive behavioral treatment for chronically suicidal borderline patients. *American Journal of Psychiatry*, 151, 1771–1776.
- Litz, B. T., Penk, W. E., Gerardi, R., & Keane, T. M. (1992). Behavioral assessment of PTSD. In P. Saigh (Ed.), *Post-traumatic stress disorder: A behavioral approach to assessment and treatment* (pp. 50–84). Boston: Allyn & Bacon.
- Marks, I., Lovell, K., Noshirvani, H., Livanou, M., & Thrasher, S. (1998). Treatment of posttraumatic stress disorder by exposure and/or cognitive restructuring: A controlled study. *Archives of General Psychiatry*, 55, 317–325.
- Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behavior*. New York: Guilford Press.
- Marlatt, G. A., & Vandenbos, G. R. (Eds.). (1998). *Addictive behaviors: Readings on etiology, prevention and treatment*. Washington, DC: American Psychological Association.
- McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*. New York: Brunner/Mazel.
- Resick, P. A., & Schnicke, M. K. (1992). Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, 60, 748–756.
- Resick, P. A., & Schnicke, M. K. (1993). *Cognitive processing therapy for rape victims: A treatment manual*. Newbury Park, CA: Sage Publications.
- Riggs, D. S., & Foa, E. B. (1993). Obsessive compulsive disorder. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 189–239). New York: Plenum.

- Vrana, S. R., Cuthbert, B. N., & Lang, P. J. (1986). Fear imagery and text processing. *Psychophysiology*, 23, 247-253.
- Wagner, A. W., & Linehan, M. M. (1998). Dissociative behavior. In V. M. Follette, J. I. Ruzek, & F. R. Abueg (Eds.), *Cognitive-behavioral therapies for trauma* (pp. 191-225). New York: Guilford Press.